

**Revision of the**

**New Hampshire**  
**State Implementation Plan**

**for the Adoption of Measures to**

**Opt-Out of the Federal**  
**Reformulated Gasoline Program**

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Prepared by

The New Hampshire  
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## 1.0 Introduction

The State of New Hampshire is submitting this revision to the New Hampshire State Implementation Plan (SIP) to further the State's objectives of opting out of the federal reformulated gasoline (RFG) program and to reduce the threat to State water resources from the gasoline additive methyl tertiary-butyl ether (MtBE). This submittal is made in accordance with the provisions of Section 110 of the federal Clean Air Act (CAA), *Implementation Plans*,<sup>1</sup> and the requirements of 40 CFR Part 51, *Requirements for Preparation, Adoption, and Submittal of Implementation Plans*.<sup>2</sup>

New Hampshire, along with most Northeast states and many other states throughout the country, has experienced a dramatic increase in the number of public and private water supplies found to be contaminated with (MtBE). Although MtBE has been used in gasoline since the late '70s, the recent increase in its use corresponds to the introduction of the federal RFG program, with its associated higher levels of MtBE, beginning in 1995. Despite undertaking a vigorous and extensive public outreach campaign regarding the proper handling of gasoline, and implementation of one of the most aggressive and successful leaking underground storage tank program in the country, the incidence of contamination of the State's water resources with MtBE continues to rise.

The New Hampshire Department of Environmental Services (DES) believes that the key to reducing the threat from MtBE is to eliminate or dramatically reduce the use of the compound in gasoline supplied to New Hampshire and other Northeast states. However, the federal Clean Air Act (CAA) and associated federal regulations pose serious obstacles to the reduction of MtBE levels in New Hampshire gasoline. Most notably, the CAA minimum 2.0% oxygen (by weight) requirement for RFG (referred to as the "oxygen mandate") results in the use of much higher concentrations of MtBE than in conventional (non-RFG) gasoline. RFG used in New Hampshire and throughout the Northeast typically contains approximately 11% MtBE by volume, which is three to ten times the typical level in conventional gasoline.

New Hampshire's Governor and General Court have recently considered several options for the elimination/reduction of MtBE contamination. In 2001, both determined that a priority preventive measure was to remove the State from the federal RFG program. In March 2001, Governor Shaheen issued Executive Order 2001-02, and shortly thereafter the Legislature passed HB 758 (New Hampshire Revised Statutes Annotated 485:16-b), both of which ordered DES to pursue an opt-out from the federal RFG program (see Attachments). In an April 2001 letter to EPA Administrator Whitman communicating New Hampshire's intent to opt-out, the Governor also requested that, since a strict interpretation of the applicable federal regulations (i.e., 40 CFR 80.72<sup>3</sup>) prevents New Hampshire from opting out of the RFG program prior to January 1, 2004, EPA address these regulations to provide for an earlier opt out date and/or such other

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<sup>1</sup> See <http://www.epa.gov/oar/caa/caa110.txt>.

<sup>2</sup> See [http://www.access.gpo.gov/nara/cfr/cfrhtml\\_00/Title\\_40/40cfr51\\_00.html](http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr51_00.html).

<sup>3</sup> See [http://www.access.gpo.gov/nara/cfr/cfrhtml\\_00/Title\\_40/40cfr80\\_00.html](http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr80_00.html).

relief as may prevent further MtBE contamination of New Hampshire's water resources between now and 2004.

DES responded to this executive and legislative mandate by filing a petition to opt-out of the federal RFG program in May 2001.<sup>4</sup> In the petition, DES indicated that the strategy to maintain the integrity of New Hampshire's SIP would be to adopt a State-level fuel measure maintaining similar performance standards for gasoline to be distributed and sold in areas where RFG is currently required (see Section 2, *Background*), while eliminating the oxygen mandate. In addition, in December 2001 DES filed a request with EPA for relief from the CAA § 211(c)(4)(A) preemption of state-level rules for fuel components and characteristics already regulated at the federal level. This plan will help to prevent further MtBE contamination of the State's water resources.

RFG has been included in certain New Hampshire SIP revisions as a mobile and area source emissions control measure for volatile organic compounds (VOCs), oxides of nitrogen (NO<sub>x</sub>), and carbon monoxide (CO). As detailed further below, New Hampshire will replace federal RFG as an ozone season control measure for VOCs and NO<sub>x</sub> by adopting rules implementing "Oxygen Flexible Reformulated Gasoline" (OFRFG) that will have similar performance standards and provide the same ozone season VOC and NO<sub>x</sub> benefits as the federal RFG program, except that no minimum oxygen content will be required.

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<sup>4</sup> See [http://www.des.state.nh.us/ard/rfg\\_optout\\_053001.pdf](http://www.des.state.nh.us/ard/rfg_optout_053001.pdf).

## 2.0 Background

New Hampshire's southern four counties (Merrimack, Hillsborough, Rockingham, and Strafford counties, collectively known as the "four-county area" shown in Appendix A) are designated as nonattainment for the National Ambient Air Quality Standard (NAAQS) for ground level ozone, in accordance with the federal Clean Air Act Amendments of 1990 (CAA). In order to bring the four-county area into attainment with the ozone standard, the State committed to several programs, as required by the CAA, to reduce the emission of ozone precursors. As one of several measures necessary to reduce emissions of VOCs from the mobile source sector (i.e., automobiles, trucks, and other non-stationary sources), New Hampshire voluntarily "opted in" to the RFG program for the four county area, commencing in 1995, to help reduce VOC emissions from the on-highway mobile and nonroad area source categories.

Under authority provided in §211(k)(6) of the federal CAA, New Hampshire petitioned EPA, via a letter from Governor Gregg, to participate in the federal RFG program on October 22, 1991. Notice of EPA's approval of this request was posted in the Federal Register on December 23, 1991 (56 FR 66444). Implementation of the federal RFG program resulted in significant VOC emissions reductions in New Hampshire and helped the State to meet CAA overall reduction targets.

The CAA and the federal RFG rule (40 CFR 80 Subpart D<sup>5</sup>) require that gasoline certified as RFG meet certain emissions reduction performance standards for VOCs, NOx, and toxic compounds. MtBE was originally used as an additive in gasoline in the late '70s to enhance octane and replace lead compounds. The presence of oxygen in gasoline helps older generation vehicles reduce CO emissions. Because MtBE contains oxygen, when certain CO nonattainment areas (e.g., Denver) were required to implement oxygenated fuels programs, MtBE was typically the additive of choice to meet program oxygen content requirements. The additive has favorable blending properties, and can be introduced during the refining process, as opposed to certain other oxygen containing compounds (also referred to as "oxygenates") that must be "splash blended" at the terminal. Conventional (non-RFG) gasoline supplied in the Northeast typically contains between 1 and 5% MtBE by volume, depending on the grade.<sup>6</sup>

In addition, the CAA also requires that federal RFG contain a minimum oxygen content of 2.0% by weight (referred to as the "oxygen mandate"). While MtBE is one of several oxygenates (others include ethanol, TAME, EtBE, DIPE, and TBA), its overall cost-effectiveness makes it the petroleum industry's primary choice of oxygenate for gasoline

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<sup>5</sup> See [http://www.access.gpo.gov/nara/cfr/cfrhtml\\_00/Title\\_40/40cfr80\\_00.html](http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr80_00.html).

<sup>6</sup> See <http://www.des.state.nh.us/ard/rfgstudy.pdf>.

distributed in the Northeast.<sup>7</sup> In order to achieve the required minimum level of oxygen (2% by weight), RFG must contain approximately 11% MtBE by volume, which is roughly 3 to 10 times the levels typically blended in conventional gas.

These significantly higher levels of MtBE in RFG distributed in the four county nonattainment area correlate with an increase in the incidence of MtBE detections, and MtBE concentrations, in public water supplies and other water resources in this area of New Hampshire. While 1.8 to 8.8% of public drinking water supplies in the northern six counties tested for MtBE in 2000 showed detections, 16.8 to 23.2% of the public water supplies in the southern four-county area (where RFG is currently required) tested in 2000 showed detections. In addition, first time detections of MtBE in New Hampshire public water supplies have increased 3 to 4 times, on average, from pre-1995 levels. It is clear that much of the increased threat of MtBE contamination to the State's water supplies since 1995 is linked to the implementation of the federal RFG program. While opting out of the RFG program will not completely eliminate the presence of MtBE in New Hampshire's gasoline, both the Governor and the Legislature have identified it as a priority preventive measure for reducing levels of MtBE in gasoline and the risk of contamination of water resources.

### 3.0 Legislative Direction and CAA/Regulatory Constraints

Since 1998, New Hampshire's Legislature has considered a variety of MtBE/RFG related legislation. Cognizant that bans of either MtBE or RFG had either significant legal implications or potential impacts to price and/or supply of gasoline, the Legislature thus far has avoided such a direction. In the spring of 2001, Governor Shaheen issued Executive Order 2001-02 and the Legislature passed HB 758 (New Hampshire RSA 485:16-b). Both directed DES to prepare and submit all necessary documentation to EPA for New Hampshire to opt-out of the federal RFG program.

In order for New Hampshire to opt-out of the RFG program the State must first demonstrate that it will still be able to achieve the VOC emissions reductions committed to in its EPA approved State Implementation Plan (SIP). These reductions were also assumed in the State's required demonstration that it can attain the ozone NAAQS by 2003. DES has determined that the quickest and most practicable control measure is the replacement of RFG with a similar State rule that achieves equivalent reductions while providing the flexibility to allow for lower MtBE levels. DES adopted such a rule, New Hampshire Code of Administrative Rules, PART Env-A 1611, *Oxygen Flexible Reformulated Gasoline* (OFRFG), on May 2, 2002 (copy attached).

Additionally, the CAA and associated federal regulations constrain the State's ability to reduce MtBE. CAA Section 211(c)<sup>8</sup> preempts States from adopting regulations for fuel

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<sup>7</sup> DES estimates that MtBE is the primary additive for meeting the oxygen mandate in more than 98% of RFG distributed in the Northeast.

<sup>8</sup> Text of federal Clean Air Act section 211(c), see <http://www.epa.gov/oar/caa/caa211.txt>

parameters already regulated at the federal level. However, States with nonattainment areas may seek a waiver from this preemption if they can demonstrate that all other non-fuel measures are not practicable and the fuel measure is necessary for attainment of the NAAQS. Such a demonstration is referred to as a “211(c) waiver”.

EPA’s RFG “opt-out” regulation (40 CFR 80.72)<sup>9</sup> requires that New Hampshire remain in the federal RFG program until at least January 1, 2004. In her April 16, 2001 letter to EPA Administrator Whitman communicating the State’s intention to opt-out of the RFG program, and in the subsequent May 30, 2001 petition to opt-out, New Hampshire Governor Shaheen also requested that EPA either revise 40 CFR 80.72 or otherwise provide relief such that New Hampshire could opt-out of the RFG program prior to 2004.

In summary, to implement this element of New Hampshire’s plan to reduce MtBE contamination in the State, DES must submit three significant documents to EPA:

- A petition to opt-out of the federal RFG program<sup>10</sup> (submitted May 2001)
- An application for relief from § 211(c)(4)(A) of the CAA, the preemption of State regulation of fuels (the “section 211(c) waiver”)<sup>11</sup> in accordance with § 211(c)(4)(C) (submitted December 2001),
- This revision of New Hampshire’s State Implementation Plan (SIP), including documentation of adoption of rules, a compliance/enforcement strategy, and a demonstration that the air quality benefits of the OFRFG will maintain the integrity of New Hampshire’s SIP.

The 211(c) waiver demonstrated that a fuel measure was the only reasonable and practicable control measure that New Hampshire could implement to replace the emissions reduction benefits achieved from federal RFG for the 2002 ozone season.

## 4.0 Demonstration of Equivalence

OFRFG will be required in the same areas of New Hampshire where federal RFG is currently required (i.e., Hillsborough, Merrimack, Rockingham, and Strafford counties), and will – by definition – provide reductions in ozone season VOC and NOx emissions equivalent to federal RFG. Relative to the State’s use of federal RFG for CO reductions, New Hampshire will demonstrate that new vehicle and fuel standards (including the federal Tier 2 Vehicle/Gasoline Sulfur Rule), coupled with New Hampshire’s fleet turnover, will provide the necessary CO emissions reductions to maintain the integrity of the State’s CO SIP commitments.

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<sup>9</sup> Currently, 40 CFR 80.72(c) prohibits states from opting-out of the federal RFG program until January 1, 2004 at the earliest. See [http://www.access.gpo.gov/nara/cfr/cfrhtml\\_00/Title\\_40/40cfr80\\_00.html](http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr80_00.html).

<sup>10</sup> See [http://www.des.state.nh.us/ard/rfg\\_optout\\_053001.pdf](http://www.des.state.nh.us/ard/rfg_optout_053001.pdf).

<sup>11</sup> See [http://www.des.state.nh.us/ard/relief\\_app.pdf](http://www.des.state.nh.us/ard/relief_app.pdf).

New Hampshire's OFRFG rule was adopted by the Department of Environmental Services on May 2, 2001 pursuant to its rulemaking authority under New Hampshire RSA 125-C:4.<sup>12</sup> The rule is patterned after the federal RFG program rules (40 CFR Part 80), with certain exceptions for State-specific conditions. The intent of the State rule is to allow the petroleum industry the flexibility to supply gasoline that provides all of the air quality benefits of federal RFG, with reduced levels of MtBE. In order to meet this purpose, the OFRFG rule includes performance standards for toxic compounds, benzene, and wintertime NO<sub>x</sub> emissions reductions. These standards are included only for consistency with the current RFG regulations, and are not being submitted for EPA approval.

Most importantly, the OFRFG rule eliminates the minimum oxygen requirement. The rule does *not* regulate oxygen content in any way, nor does it ban MtBE or any other oxygenate. The purpose of not including the oxygen mandate is to provide flexibility to the petroleum industry in reducing MtBE without constraining it in any other way.

The other major difference between federal RFG and OFRFG is that the federal rule allows either refinery average *or* per gallon performance standards, while the State rule allows per gallon standards only. Since there are no petroleum refining facilities in New Hampshire, and because DES has no authority to regulate the industry outside of the State, it is not practicable for a state rule to allow for refinery averaging. DES therefore chose per gallon performance standards equivalent to the per gallon minimum standards established in 40 CFR 80.41(f). In 1997, however, EPA withdrew the NO<sub>x</sub> per gallon minimum performance standard from this section. DES has thus chosen to use the NO<sub>x</sub> per gallon minimum standards that were included in the federal RFG rule prior to the 1997 withdrawal (i.e., = 3.0 % for gasoline designated as VOC controlled, or = -2.5% for gasoline not designated as VOC controlled.)

Appendix B lists the seven New Hampshire SIP revisions that include RFG as a control measure to achieve federally required emission reductions. Of these, five include RFG as a VOC and/or NO<sub>x</sub> control measure, and three of these have received final approval from EPA. Two SIP revisions include RFG as a CO control measure to maintain attainment of the federal CO standard, and both of these have received final approval from EPA. The following sections address each of these SIP submittals, describing federal RFG's contribution to the required emission reductions and how OFRFG will provide the same degree of emission reductions as the federal RFG program.

#### **4.1. Previously Approved SIPs with Federal RFG as a VOC Control Measure**

Federal RFG is used as a VOC control measure in the following EPA-approved New Hampshire SIP revisions:

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<sup>12</sup> See <http://gencourt.state.nh.us/rsa/html/X/125-C/125-C-4.htm>



- *1996 15% VOC Rate of Progress Plan* (approved December 7, 1998, 63 FR 67405);
- *Stage II Comparability Analysis SIP Revision* (approved September 29, 1999, 64 FR 52434); and
- *Clean Fuel Vehicles SIP Revision* (approved September 29, 1999 64 FR 52434).

By definition, OFRFG will provide reductions in VOC emissions equivalent to federal RFG, so no change from the VOC emission reduction values in the existing SIP revisions is expected. OFRFG will be required in the same areas of New Hampshire that federal RFG is currently required (i.e., Hillsborough, Merrimack, Rockingham, and Strafford counties).

#### **4.2. Previously Approved SIPs with Federal RFG as a CO Control Measure**

Federal RFG is referenced as part of New Hampshire's demonstration that the Manchester and Nashua areas will continue to maintain attainment of the National Ambient Air Quality Standard (NAAQS) for CO, as outlined in the following maintenance plan SIP revisions:

- *Redesignation to Attainment for CO in Manchester, NH* (approved November 29, 2000, 65 FR 71060); and
- *Redesignation to Attainment for CO in Nashua, NH* (approved November 29, 2000, 65 FR 71060).

While some CO benefits are associated with the use of federal RFG in older vehicles, the Manchester and Nashua areas have monitored attainment with the CO NAAQS since 1990 (i.e., five years before the federal RFG program was implemented in New Hampshire). Federal RFG was clearly not necessary to attain the CO standard in these areas, and is not necessary to continue to maintain attainment of the CO NAAQS in the future.

The approved SIP revisions for redesignation of the Manchester and Nashua areas included demonstrations that total projected CO emissions from on-road mobile, off-road area, and stationary point and area inventory source categories would not exceed the 1990 base year emissions (1990 is also the initial attainment year). Of these four source categories, only the on-road mobile source and off-road area source categories would be impacted by the discontinuation of the RFG program.

Since the submission and approval of the redesignation SIP revisions for Manchester and Nashua, new models for emissions projections in both of these source categories have been developed and released by EPA. The MOBILE 6 model for estimating on-road mobile source emissions was released in January 2002, replacing MOBILE 5b. The NONROAD model, issued in draft form in 2000, is used for estimating emissions from off-road mobile sources such as construction equipment,

commercial and residential yard equipment (lawn and garden, snow blowers, etc.), and recreational vehicles (motorcycles, snowmobiles, etc.). Although the draft NONROAD model is not specifically approved by EPA for use in SIP submittals, it is the best estimation tool for this source category currently available, and EPA has previously approved submittals from other States based on this model.

For on-road mobile source emissions, DES used the MOBILE 6 model to estimate emissions for the 1990 base (attainment) year and for the years 2003, 2010, and 2020. Mobile source CO emissions from motor vehicles in both Manchester and Nashua are projected to decrease significantly from the base year inventory, based on the MOBILE 6 projections (MOBILE 6 input and output files are attached in Appendix C.) Off-road mobile source emissions were projected for the same years using the draft NONROAD model (scenario and output files are attached in Appendix D.) CO exhaust emissions were modeled for Hillsborough County and apportioned to Manchester and Nashua on a population basis.

Tables 1 and 2, on the following page, summarize the emissions for these two source categories in Manchester and Nashua for the years analyzed in the redesignation SIP revisions (2003, 2010, and 2020). Mobile source emissions are significantly reduced even without RFG, due to the technology enhancements required by the federal Tier I and Tier II vehicle emissions standards effective in 1994 and 2004, respectively. Non-road emissions without RFG increase only slightly in comparison to those with RFG. The net result, displayed in the final column of the tables, shows overall CO emissions reductions of between 30 and 60 tons per winter day in Manchester, and between 20 and 50 tons per winter day in Nashua if RFG use was discontinued. It is not expected that the replacement of the federal RFG program with New Hampshire's OFRFG rule will completely eliminate the CO benefits of the federal program. However, this analysis does not include any CO benefit (as compared to the CO benefit of federal RFG as predicted by the MOBILE 6 model) that would come from implementation of OFRFG. Therefore, the integrity of the New Hampshire CO redesignation SIPs is maintained.

**Table 1. Projected On-road and Off-road Mobile Source  
CO Emissions for Manchester**

Year	Population		Winter CO Emissions, tons per winter day					
	Hillsborough County	Manchester	On-road		Off-road			D <sub>total</sub> ( $\Delta_1 + \Delta_2$ )
			w/o RFG	$\Delta_1$ (from base year)	w/ RFG	w/o RFG	$\Delta_2$	
1990	336,073	99,567	99.18	-	-	16.9	-	-
2003	390,438	108,478	61.50	-37.68	18.8	20.1	+1.3	-36.38
2010	414,763	111,921	43.55	-55.63	20.7	22.1	+1.4	-54.23
2020	466,967	116,020	38.35	-60.83	22.4	24.0	+1.6	-59.23

**Table 2. Projected On-road and Off-road Mobile Source  
CO Emissions for Nashua**

Year	Population		Winter CO Emissions, tons per winter day					
	Hillsborough County	Nashua	On-road		Off-road			D <sub>total</sub> ( $\Delta_1 + \Delta_2$ )
			w/o RFG	$\Delta_1$ (from base year)	w/ RFG	w/o RFG	$\Delta_2$	
1990	336,073	79,662	86.83	-	-	13.6	-	-
2003	390,438	85,940	58.86	-27.97	14.9	15.9	+1.0	-26.97
2010	414,763	87,997	42.61	-44.22	16.3	17.4	+1.1	-43.12
2020	466,967	91,145	36.49	-50.34	17.6	18.9	+1.3	-49.04

#### 4.3. New Hampshire Post-1996 Reasonable Further Progress Plan SIP Revision

Federal RFG is used as a VOC control measure in New Hampshire's *Post-1996 Reasonable Further Progress Plan SIP Revision*. EPA approval of this SIP revision is currently pending. New Hampshire does not intend to withdraw this SIP revision. However, because opting out of the federal RFG program could affect both the administrative completeness and the ultimate approval of this SIP revision, the State will replace federal RFG as a VOC control measure by adopting rules to implement OFRFG that will provide VOC emissions reductions equivalent to those achieved by federal RFG. As a result, no change from the VOC emission reduction values in the pending SIP

revision is expected. As noted above, OFRFG will be required in the same areas of New Hampshire that federal RFG is currently required (i.e., Hillsborough, Merrimack, Rockingham, and Strafford counties).

#### **4.4. New Hampshire 2003 Ozone Attainment Demonstration SIP Revision**

Federal RFG is used as an ozone season control measure for VOCs and NO<sub>x</sub> in New Hampshire's 2003 *Ozone Attainment Demonstration SIP Revision*. Specifically, the photochemical modeling conducted to demonstrate attainment in this SIP revision assumed that federal RFG would be required in New Hampshire's four-county nonattainment area. EPA approval of this SIP revision is currently pending. New Hampshire does not intend to withdraw this SIP revision. However, because opting out of the federal RFG program could affect both the administrative completeness and the ultimate approval of this SIP revision, New Hampshire will replace federal RFG as a VOC and NO<sub>x</sub> control measure by adopting rules to implement OFRFG that will provide VOC and NO<sub>x</sub> emissions reductions equivalent to those achieved by federal RFG. As a result, no change from the VOC and NO<sub>x</sub> emission reduction values in the pending SIP revision is expected. Again, OFRFG will be required in the same areas of New Hampshire that federal RFG is currently required (i.e., Hillsborough, Merrimack, Rockingham, and Strafford counties).

## **5.0 Compliance and Enforcement**

Enforcement of the gasoline standards in Env-A 1611 is the responsibility of the Department of Environmental Services. DES authority for enforcement of its rules is found in New Hampshire Revised Statutes Annotated (RSA) Chapter 125-C:6, *Powers and Duties of the Commissioner* and 125-C:15, *Enforcement*.<sup>13</sup> DES intends to conduct routine random sampling on both a scheduled and unscheduled basis at retail gasoline distribution facilities throughout the four county area. Monitoring at the retail level is necessary as the wholesale storage and distribution of gasoline other than OFRFG (i.e., conventional, Maine Low RVP, etc.) in the covered area is not prohibited by the State rule.

The DES monitoring and enforcement program will be conducted in conjunction with compliance activities for other DES programs directed at gasoline distribution facilities, such as underground storage tank inspections and/or Stage II vapor recovery testing and inspections. Samples will be field tested for gasoline parameters necessary to run the Complex model<sup>14</sup> found at 40 CFR 80.45 with the PetroSpec GS-1000. Samples that do not meet the performance standards for OFRFG contained in Env-A 1611 will be submitted to a gasoline-testing laboratory for confirmation tests for enforcement purposes in accordance with the testing methods at 40 CFR 80.46.<sup>15</sup> In addition, approximately

<sup>13</sup> See <http://www.gencourt.state.nh.us/rsa/html/X/125-C/125-C-6.htm> and <http://www.gencourt.state.nh.us/rsa/html/X/125-C/125-C-15.htm>.

<sup>14</sup> See [http://www.access.gpo.gov/nara/cfr/cfrhtml\\_00/Title\\_40/40cfr80\\_00.html](http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr80_00.html)

<sup>15</sup> See [http://www.access.gpo.gov/nara/cfr/cfrhtml\\_00/Title\\_40/40cfr80\\_00.html](http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr80_00.html)

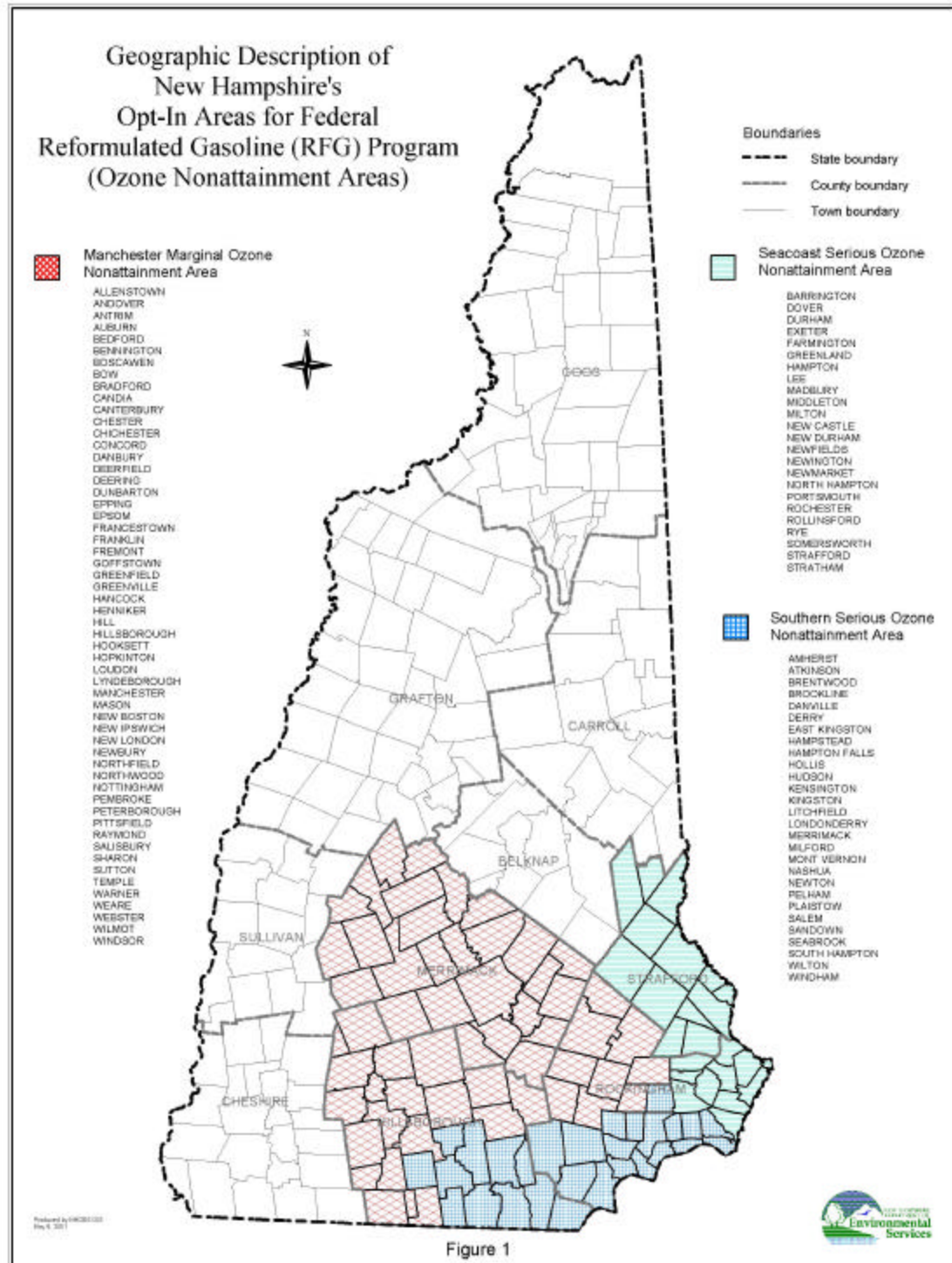
5% of all samples will be submitted for laboratory confirmation analysis as a quality assurance procedure.

It is anticipated that DES compliance staff will take approximately 200 gasoline samples from approximately 100 facilities (representing 25% of the total facilities in the covered area) annually. The estimated cost of this program, including inspection labor, laboratory analytical costs, petroleum sample screening equipment, and legal support is anticipated to be approximately \$75,000 in the first year and \$25,000 annually thereafter.

Upon confirmation, non-compliant sampling results will be referred for appropriate enforcement action in accordance with the procedures in RSA 125-C:15.

## APPENDIX A.

### New Hampshire's Opt-In Areas for Federal RFG



## APPENDIX B.

### Revisions to New Hampshire's State Implementation Plan Which Rely Upon Federal RFG as a Control Measure

State Implementation Plan (SIP) Revision	Submission Date	EPA Approval Status	Federal Register Notice
New Hampshire 1996 15% VOC Rate of Progress Plan	Submitted to EPA August 29, 1996	Approved by EPA December 7, 1998	63 FR 67405
New Hampshire Stage II Comparability Analysis	Submitted to EPA April 30, 1998	Approved by EPA September 29, 1999	64 FR 52434
New Hampshire Clean Fuel Vehicles SIP	Submitted to EPA June 7, 1994	Approved by EPA September 29, 1999	64 FR 52434
Carbon Monoxide (CO) SIP Revision Redesignation to Attainment for CO in Manchester, NH	Submitted to EPA December 11, 1998	Approved by EPA November 29, 2000	65 FR 71060
Carbon Monoxide (CO) SIP Revision Redesignation to Attainment for CO in Nashua, NH	Submitted to EPA November 30, 1998	Approved by EPA November 29, 2000	65 FR 71060
New Hampshire Post – 1996 Reasonable Further Progress Plan	Submitted to EPA September 27, 1996	EPA approval is <u>pending</u> . EPA found that the submittal was complete on October 9, 1996. New Hampshire fulfilled its obligations under the Clean Air Act Section 182(c)(2)(B) with the State's submittal on September 27, 1996.	n/a
New Hampshire 2003 Ozone Attainment Demonstration	Phase I submitted to EPA June 2, 1995; found complete by EPA December 2, 1995  Phase II submitted to EPA June 30, 1998	EPA approval is <u>pending</u> . New Hampshire fulfilled its obligations under the Clean Air Act Section 182(c)(2)(A) with the State's submittals on June 2, 1995 and June 30, 1998.	n/a

## **APPENDIX C.**

### **MOBILE 6 Model Input and Output Files**



## **APPENDIX D.**

### **NONROAD Model Scenario and Output Files**